



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/796,877 | 03/09/2004 | Artemio Affaticati | RAP04 P-610B | 2915 |
| 28101 | 7590 | 11/16/2004 | EXAMINER | |
| VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695 GRAND RAPIDS, MI 49588-8695 | | | DEUBLE, MARK A | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 3651 |

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------|-------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/796,877 | AFFATICATI ET AL. |
| | Examiner Mark A. Deuble | Art Unit 3651 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10/11/04

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 16-33, 58-67, 83-98 and 121-133 is/are pending in the application.

4a) Of the above claim(s) 58-67 and 121-133 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 16-18, 24-33 and 83-98 is/are rejected.

7) Claim(s) 19-23 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/9/04

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 16-33 and 83-98 in the reply filed on October 11, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 58-67 and 121-133 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 11, 2004.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 17-18 and 83-98 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "said merge" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 83 recites the limitation "said merge" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

Claims 32-33 and 97-98 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that the claims fail to correspond in scope with that which applicant(s) regard as the invention can be found in

Paper No. 1 filed March 9, 2004. In that paper, in the first paragraph of page 6, applicant has stated that after the induction system books a product for a particular location on the continuous member 26 the remaining conveying units 36 between the point of booking and the discharge end adjust the relative spacing between the product and the respective booked location on the continuous member to insure that the products are discharged onto their booked location. This statement indicates that the invention is different from what is defined in the independent claims, and claims 32-33 and 97-98, because these claims require the at least one induction unit follow a speed of the continuous member including starting substantially as soon as the continuous member is moving and decreasing in speed substantially only when the continuous member decreases in speed. It is impossible for the induction conveyor to follow the speed of the continuous member and to adjust the spacing between the product and it's booked location on the continuous member to insure that the products are discharged onto their booked location. If the induction conveyor follows the speed of the continuous member, the products will only be discharged to their booked positions on the continuous member is the products are fed to the induction unit with a constant predetermined spacing equal to the spacing of the locations to be booked which is not the case with the system of the present invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 16, 24-33, 83, and 89-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Affaticati et al. (U.S. Patent No. 5,588,5250).

Affaticati et al. shows a sortation system comprising a sorter, a plurality of sort destinations 46 for receiving product discharged from said continuous member, and an induction system comprising a plurality of induction units 26. The sorting conveyor includes a continuous member 30 defining a plurality of transport positions 32 to which packages are fed by the induction units of the induction system. Each induction unit includes a plurality of tandem conveying units 62a-d leading from a receiving end on unit 62a for receiving a product from a product source to a discharge end on unit 62d for discharging product to the continuous member (see Fig. 7). Each of the conveying units are closed loop regulated belt conveyors 36 which may be shorter than the product being discharged to the continuous member when the product is a long product assigned to multiple adjacent transport positions on the continuous member. The primary induction unit is operated continuously to book at least one transport position on the sorter for receipt of a product from the primary induction unit. This is accomplished at the synchronization belt 62c which requests reservation of one or two empty transport units detected by photosensor 37 via induction control 64 and sortation control 66. The synchronization belt then adjusts the relative spacing between the product and the booked transport position for the product by initiating acceleration of the product at the appropriate time and feeding it to the loading belt which further adjusts the relative position of the parcel by accelerating the product and feeding it to the booked transport position on the sorter. The adjacent secondary induction unit does not follow the continuous member and it is capable of decreasing in speed and being stopped completely irrespective of the speed of the independent member so that, when there are a

large number of available transport positions on the sorter, the adjacent secondary induction unit may be activated to supplement the supply from the primary induction unit. This arrangement allows multiple products to be booked on either induction unit on the same time while they are awaiting discharge to the sorter. It should be noted that the control 66 maintains any booking of transport units for products notwithstanding variation or halt in speed of the continuous member by monitoring the speed of the sorter with an encoder 76 (col. 4, ln. 48-54). Furthermore, it should be noted that the induction control 64 determines the length, width, and position of each product in the induction station through sensor 68 and communicated this information to a main control system 78. The storage of this information amounts to the determination of a gap between products that will be discharged to the continuous member from the induction system. While it is preferred that set gaps between products be established in the induction units, this gap may be changed depending on the products and therefore each induction unit is capable of discharging product to the continuous member irrespective of the gap between products. Thus Affaticati et al shows a sortation system with all the structure required by claims 16, 25-33, 83, 90-98.

Allowable Subject Matter

7. Claims 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 17-18 and 84-88 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wentz et al., Small et al., and Vanacore et al. all discuss controls determining gaps between products that will be discharged to a continuous member in a fashion similar to that of the present invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600